The Poultry Bulletin.

ISSUED MONTHLY

By the Executive Committee of the New York State Poultry Society.

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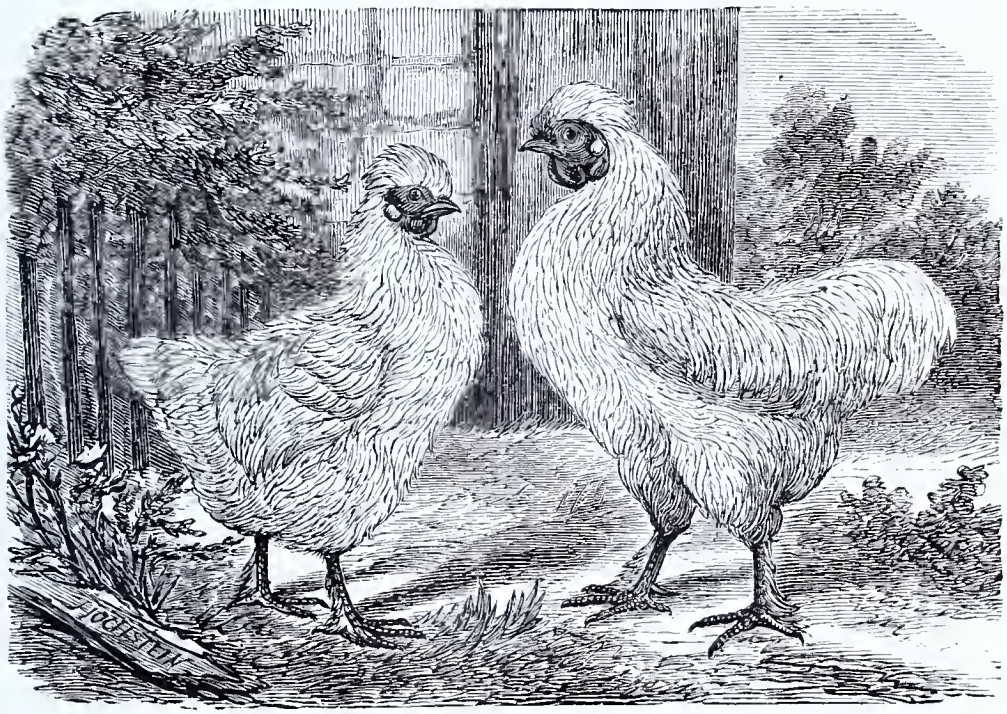


SILKY FOWLS.

The Silky Fowl.

The origin of this singular breed of fowls is lost in antiquity. They were known and described by Gesner in the early part of the sixteenth century. It is a native of Eastern Asia, being found in China and India. The usual color is white, the skin being dark blue or black. The comb is irregular rose-shaped, purple or black in color, as is also the face and wattles; and the ear-lobes are a bright blue. The beak is short and thick and dark in color. Legs and feet are dark blue, nearly black. The web of the feathers does not adhere together, but is long, fine, and silky, from which they derive the name. Another peculiarity of the breed is that the periosteum, or membrane which covers the bones, is dark blue or black. This gives the fowl a very uninviting appearance when served on the table; but those who have overcome the repugnance state that the flesh is as good and well-flavored as that of ordinary fowls.

The peculiar formation of the feather renders their wings of no service in flying. They appear quite bulky, but the average weight of the cocks is not over 2½ to 3 lbs., and the hens about 2½ each. Their eggs are small, and in color a pale buff. In America they are kept merely as a matter of fancy; in England, however, they are used to hatch and rear pheasants and other game birds, as well as bantams. Mr. Hewitt says of them, "I am certain that no fowls I ever possessed were so satisfactory for rearing pheasants, partridges, and other delicate youngsters. Under their protection I scarcely lost a single chicken. The unusual warmth of their plumage, no doubt, produced this result; and they are certainly well worth a trial to those who are interested in the production of

game artificially. They were also tolerable layers, and the eggs were of equal excellence to those of other fowls. The young chickens are both interesting, unique, and very beautiful. They are certainly a variety of poultry that require far more protection from hard and wet weather than most others. Their downy covering soon becomes saturated, and if much exposed, disease inevitably ensues."

With the last the writer differs. We once kept a trio of Silkies through the winter (and quite a severe one at that), in a board coop 3 feet square, with a lath-covered run of the same size. During the winter we had a great deal of snow; several falls of a foot and over in depth. The fowls were out and in at pleasure, and showed no signs of sickness or injury from the exposure. We found them indifferent layers.

They are well adapted to a lawn or garden, or small run, as they do not fly, and are contented and thrive in very contracted limits. The shortness of their legs, and the wooly covering, give them the appearance of little balls of down perambulating over the grass. The young chicks are at first a beautiful canary color, and, as may be imagined, are exceedingly pretty. These do require more care than ordinary chicks, as the least rain drenches them to the skin. the downy covering acting like a sponge, and collecting water instead of shedding it.

Eggs Hatching Badly.

EDITOR POULTRY BULLETIN:

DEAR SIR—In your June number, under the head of "Eggs Hatching Badly," you ask for information from all parts relating to this subject. Our spring is about one month later than usual, with plenty of rain, very little bright warm weather, but mostly dull, gloomy, and cool, with comparatively little thunder and lightning, high west winds, and moist atmosphere. From seven hens, with worse than no care, I have sixty-four good live chicks—two died after hatching from exposure and four eggs were broken with live chicks in them. Some of the eggs after two week sitting were removed to hens that had hatched their broods, in order to set "fancy eggs," twelve of the eggs (Buff Cochin) were got from Columbus, Wisconsin, and shipped here by express, and every egg hatched.

Dubuque, Iowa. "BEGINNER."

MR. C. B. BRYANT, Portland, Me., writes: "I have set 39 dark Brahma eggs, and did not get one chick, but I am not alone. I know of one man that has set eighty eggs, and has not got a chick. They also were dark Brahmas."

MR. L. KRIECKHAUS, St. Louis, Mo., says: "The complaint is universal out here; my brother at *Sedalia* writes me that out of one hundred game eggs he has but fifteen chicks."

EDITOR POULTRY BULLETIN:

DEAR SIR—March 19th I received thirteen (13) light Brahma and thirteen Partridge Cochins eggs, by express, from Taunton, and set them the same day. March 21st the thermometer stood at 10 deg. above zero. March 24th the barrels were covered eighteen inches in snow. (I always set my hens in barrels turned on the side, banked up with earth, and the nest formed with earth, before the hay or straw is put in.) April 10th (evening) one chick had broken the shell; soon after dark we had a tempest, accompanied with thunder and lightning; the next morning I had three Partridge Cochins and two light Brahma chicks; no chicks found in the remaining eggs. April 19th I received thirteen light Brahma eggs from same parties; set them April 22. May 13th eleven chicks. April 23d I received 11 Partridge Cochin eggs; set them April 25th. May 16th gave four chicks. Out of the fifty (50) eggs received by express twenty (20) chicks. I do not think we ought to expect too much from eggs sent by express. The express agents of the present day do not seem to care how they handle goods. April 27th I set fifteen (15) Buff Cochin eggs from my own yard, and May 18th gave me fifteen chicks. Every egg hatched. Some of the eggs were ten to twelve days old when set. During the last three settings we had the dryest weather; no thunder. All the chicks are very well and strong. The eggs were sprinkled with water three days before hatching.

Yarmouthport, Mass. R. H. HARRIS.

EDITOR BULLETIN:

DEAR SIR: We are having the same trouble with our eggs in this vicinity—hen after hen coming off without a chick. It is not confined to one breed, but all seem to suffer alike. I know of one person who has set nine hundred eggs and has less than two hundred and fifty chicks. Many others have suffered the same way. I do not think the fault is in the hens setting, for they seem to have attended strictly to business; neither can we lay it to the places where they were set—house cellars, barn cellars, barn chambers, hen houses, and, in fact, every place has given the same result. Hens whose eggs hatched well last season do not hatch this. What is the cause of it? Can any one tell? I have given the matter considerable study, but have not been able to arrive at a satisfactory result.

Nashau, N. H. YEURS, &c., A SUBSCRIBER.

EDITOR POULTRY BULLETIN:

DEAR SIR—I find in my BULLETIN an article "Eggs Hatching Badly." Being anxious to discover the true cause, if possible, I will give you my experience and the general result in this locality. Every one about here who has at-

tempted to increase his flocks seem to have had the same result. Last of March I put thirteen eggs under an old hen, who knew how it was herself. After being faithful to her calling over three weeks, I removed her and broke the eggs, and found nothing like a chick. From first to middle of April I set a number of others with great care, and watched them closely. No. 2 came off with same result. No. 3 had six heads Partridge Cochins, from Boston, and five of my own, same kind; she came off with one chick. No. 4, sitting on ten Partridge Cochins and four half blood from my own stock, came off with five chicks. Nos. 5 and 6 came off this week, same day, with twelve and thirteen chicks, having set thirteen eggs under each. No. 7 came off to-day with five, but I find dead chicks in the other eggs. Last week she left her eggs, and went on to another nest close by, and her eggs were left from 10 A. M. to 2.30 P. M. I attribute the ill luck to that. The old fogies about here say thunder is the cause. When my first three hens were sitting we had but very little rain, but the past two weeks we have had a very wet time, minus the thunder. My neighbors have had similar experience Yours, &c.,

Bellows Falls, Vt. E. E. DEWEY.

WE shall make no comments on the reports thus far received, as we have many now on hand which arrived too late for this number. We hope to hear still further from breeders on this subject, and would suggest to them that in addition to a statement of their *particular* experience, they give answers to the following questions:

1st, Are your yards on high or low ground? 2d. Were your hens set in a building or under a shed, and how were your nests constructed. 3d. how many hens were with one cock? If two or more yards, state from which yard (and number of hens to cock) eggs hatched best. 4th. Was the weather wet or dry during time of Incubation? 5th. Was there any severe thunder storms during said time and at what period? 6th. When there was any change in the weather, was there any noticeable difference in the hatching? 7th. What proportion of eggs have hatched during the season, or number of eggs set and how many chicks were hatched?

Caponizing.

The present month and August, are usually those in which young Cockerels arrive at a suitable age for this operation; which is about four months. The French mode of performing this is given in No. 4 of the *Illustrated Book of Poultry*, as follows:—

The instruments are two—a small curved knife, kept very sharp, and a curved surgical needle, with some waxed thread. Two persons are required, one of whom operates while the other holds the bird. The operator sits down, and the assistant holds the bird on his lap, with its back towards him, and the right side downwards; the lowermost leg being held firmly along the body, and the left leg being drawn backwards towards the tail, so as to expose the left flank, when the incision is made. A few feathers being plucked off to expose the skin, the latter is raised up with a needle to avoid the intestine, and an incision large enough to admit the finger easily is made into the abdominal cavity, just at the posterior edge of the last rib; in fact the knife is kept close to the edge of the bone as a guide. Should any portion of the bowels protrude through the wound, they must be gently returned. The forefinger is then introduced and passed behind the intestines toward the spine, on each side of which the two testicles are situated, being in a young bird of four months, rather larger than a horse-bean. One of the testicles being felt, it is to be gently torn by the finger away from its attachment to the spine, and removed through the wound, the other being afterwards sought for and removed in the same manner. Care must be taken that the testicle does not slip away among the intestines after it is detached, when its detection and removal from the body may be difficult; but even if this accident should occur, it is not often followed by serious results, though occasionally it does excite inflamation.

Both testicles being safely removed, the edges of the wound are brought together and kept in the proper position, by two or three stitches with the waxed thread. These are made in the usual surgical mode, each stich being detached, and separately tied, not sewn as a seam. In making them the chief thing to guard against, is to avoid ever pricking the intestines with the needle, much less including any portion of them in the stitch, which last would inevitably result in the death of the fowl. When all is done rightly there should be but little bleeding or suffering: and the whole being safely over, the bird should be put under a coop in a quiet place and given only soft food, such as sopped bread, and water. After a few hours he may be put by himself in a run or yard; but until perfectly healed must not be allowed to perch, but obliged to sleep on straw. For three or four days the soft food alone must be continued; and when entirely recovered, the bird may be either set at liberty if wanted to rear chickens, or put up to fatten.

AN amateur complains that our poultry-breeders are becoming over nice in artistic trifles. Scarcely one egg in a million will hatch a chick that is up to their "standard of excellence," and yet they may be pretty fresh eggs for all that, and quite nourishing.

The Utility of a Scale of Points.

The address of the Hon. J. Stanton Gould delivered at Albany, in Feb., last, at the opening of the Exhibition of the N. Y. S. Poultry Society, created a great deal of interest, not only in this country, but in England. We have briefly commented on portions of the address, which, with Mr. Gould's replies, has already been laid before our readers. Mr. Lewis Wright, in his new work, "The Illustrated Book of Poultry." Part 5, (advanced sheets of which, containing the following, Mr. W. has kindly forwarded to us) most ably answers some of Mr. G's arguments.

Although the article is a long one for our columns, it is of such deep interest to all breeders, that we cannot condense it; but give it in full.

"It is often asked, Why are not fowls judged according to their laying, their hardiness, or their qualities, instead of the color of a feather or the shape of a comb? This question has been lately put with unusual point and force by the Hon. J. Stanton Gould, in a long address delivered in Febuary, 1872, before the New York State Poultry Society; and which, from the high reputation of the speaker as a stock-breeder, has deservedly aroused great attention among American poultry breeders. We extract the pith of Mr. Gould's remarks on this head as follows:—"

"In the rules for judging Brahmas I am told that the beak "must be well curved." I would respectfully ask why? If I have two Brahmas, A and B—A having a well curved beak, and B having a beak which approaches more nearly to a straight line—is the curved beak any evidence that A will lay on more flesh for a given amount of food, or lay more eggs, or is in any other respect a better hen than B? I read further in the same standard of excellence that the Brahma must have a pea-comb . . . . but why, I ask in the name of common sense, is it necessary that a Brahma should have a pea-comb? . . . . If it is true that the pea-comb is no indication of the excellence of the fowl, or of its profitableness, or of its purity of blood; and if it does not minister to the æsthetic gratification of its owner, it is not simple nonsense to include it among the points of excellence of the breed?" After other instances to the same effect, Mr. Gould concludes this part of his subject by remarking, "I hope that you will candidly consider these objections; for I feel very sure that there can be no real advance in poultry-breeding until it is removed from the realms of caprice and fancy, and placed upon the sure foundations of anatomical and physiological science."

The speaker then further urges that the value of size in any breed is much exaggerated. "It is not contended," he says, "by any one, that a hen which weighs a pound or two more than another will necessarily lay a greater number or a greater weight of eggs than a smaller one; all the superiority, therefore, in an extra pound of flesh, or perhaps of bone, is at the utmost measured by the price that this extra pound will sell for in the market. Suppose that it turns out, as the result of experiment, that this extra pound costs more to put on than the market price; surely then it cannot be considered that this extra weight is a merit, it must rather be looked upon as a demerit." Passing on then to what he considers *should* be the points to be encouraged, Mr. Gould advocates, in the first place, the seeking of "the greatest weight in the smallest relative compass;" and in the second, those breeds in which "the greatest bulk is concentrated round the most valuable parts."

It is impossible to put such questions more forcibly and fairly than they have been put by this able speaker, and we devote this short chapter to their answer, because they are constantly asked by persons who only have a partial acquaintance with the subject or with the fowls themselves, and the answer has a very important bearing upon the question of poultry cultivation considered as a whole. When, then, Mr. Gould complains that the arbitrary standards "tell us nothing about the physiological condition of the birds—nothing about their capacity for laying on flesh—nothing about their capacity for laying eggs—nothing about their powers of digestion and assimilation—nothing about their hardihood"—and asks why they are not judged according to *these* points; the first answer which occurs after a little thought is the very simple one, that it *cannot be done.* Such matters must of necessity depend chiefly upon *testimony*, and hence are inadmissable in a show. We *could not see* in an exhibition pen, which was the best layer of two competing hens, but colour, or shape, or size we *can* see, and therefore by these we determine, since they are the only elements which can bring fanciers into visible competition. To go by evidence would never be tolerated, and would lead to many evils which do not need to be here specified. We need something which can be brought actually before our eyes; and even with regard to shape, the feathers with which a bird is clothed prevent such nice discrimination as is possible in the case of a Shorthorn bull. The actual outline of the body cannot be seen, and to decide by careful feeling would be simply impossible in the time given for judging large numbers of poultry pens. We might point out that even in agricultural stock the *mere* seeking of such "utility" points has degenerated into notorious over-fattening of the show beasts; but the *tu quoque* argument has little place here, and we come back therefore to the evident necessity, from the nature of the case, of certain *plainly visible* points by which judging may be determined. Whatever these are, they would be equally arbitrary, and we may as well have the present as any others, except where a fowl is evidently capable of improvement in beauty without losing the characters of the breed.

So with regard to size, Mr. Gould's objection is plausible, but will not stand the test of consideration. When a man buys a ram at a high price, because both flesh and fleece are better than the common breeds, the extra flesh and fleece of *this* ram will most certainly be worth only an infinitesimal fraction of the price paid; but the animal *stamps these features on a progeny*, and in this way his cost is well repaid. So in poultry, it may cost five shillings to put on a fowl an extra pound, which may only sell for ninepence in the market. But in the next generation the extra pound will cost far less to produce; and so in a little while *a race is established* which, without special care, reaches a pound

heavier than formerly, When established, this standard of size is by the same means maintained, and is a permanent benefit; for even were it the case that an extra pound which sells for ninepence cost ninepence in food to produce it, there would still be a gain, from the fewer number of fowls to feed, and hence less cost of labour, to produce a given weight of meat But this is not the case, for it is always found that large breeds cost less to produce per pound than small, besides making their weight at so much earlier an age, and hence giving a quicker return for the capital invested in them. We might say indeed, that the bare fact of our posessing large breeds at all is an evidence of the value of this cultivation of size, being simply the result of that selection which arouses Mr. Gould's doubts as to its utility.

Lastly, Mr. Gould's own cardinal principals will not stand when practically applied. The breed which combines the greatest weight in the smallest relative compass is unquestionably the Game; and that which has the greatest proportionate weight in the choicer parts is probably the Malay, which in relative weight of the breast, merry-thought, and wings together, exceeds any other fowl, but neither of these breeds in ordinary circumstances can be called profitable poultry. Mr Gould in the same address admits the Brahma to be one of the most valuable breeds; yet by both these canons it would be excluded. There are in fact a dozen circumstances to be considered before the value of a breed is known. There are not only to be weighed its proportions of parts, but its laying, its hardiness, its domesticity, its precocity, and the comparitive cost per pound to produce its carcase; and from these various causes almost every breed has some special value, for the sake of which it could ill be spared, and even when comparatively of little value in itself, is often highly useful as a cross.

The question has also another aspect. By thus keeping a high standard of artificial points, below which a bird is comparitively valueless, conventionally perfect specimens will always be few; and we ensure a large number of birds which in these particulars are below par, but which possess all the *economic* merits of the variety to which they belong, and which are available for purely commercial purposes at a very moderate price. That celebrated breeders are often glad to dispose of such extra stock at only a few shillings over the price of ordinary fowls is notorious; and as the hiring of a good ram at a high price is directly remunerative in the increased fleece and mutton produced, so the effect in the case of poultry is equally capable of being calculated. Supposing a farmer's breeding-stock of one ordinary cock and seven hens is worth £1, or 2s. 6d. each bird, the differencce in value of a fair Dorking cock at £1 and seven Brahma hens at 10s. each (and we have often been glad to sell pullets posessing every desirable quality, but useless for show, at this price) will be £3 10s.; and if all their eggs were set and reared for market, this extra cost would be many times repaid in the extra weight, hardiness, and early maturity of the produce. And though these parent birds would be such as by the amateur are vulgarly called "screws," they are such as will never be reared by the mere farmer. The birds of fanciers attain a size which is never kept up long by the commercial breeder, simply because they get such food as the breeder or farmer will never give. The best milk, the best meal, eggs, meat, assiduous care —are all devoted to them: and the despised amateur thus maintains the stock, which furnishes the raw material for all real improvement in market poultry. Without his "points" to breed to, he would never do this. Granted that his standards are artificial, and some of them even ludicrous and opposed to every principal of æsthetic beauty, still they are dear to his heart; they are *his* ideal of beauty and grace. Every one has such. Dear, simple Hans Christian Anderson understood this well, and we cannot do better than quote one of his exquisite fables: but we will change his title, and call it for the nonce a treatise on

THE BEAUTIFUL.

"Gone! Gone! The beautiful is gone! The roses have faded, and the leaves fall down. The birds which used to sing are dumb, and the pigs go out huuting for acorns, and they are now the lords of the forest!"

Thus sighed the rose-king. Do you know him? He is easily recogni-ed. Go up to the wild rose-bushes, and when in autumn the flowers are all faded, and only the hips remain, you will often find under them a great red-green moss flower. That is the rose-king. A little green leaf grows out of his head, which is his royal feather. He is the only one on the rose-bush; and he it was who sighed.

Under the trees, in the hollow, was a great puddle, and here all the pigs lay, big pigs and little ones. The place was to them so beautiful, and they were all so clever and so fat! "Oui! oui!" they kept on saying; it was all the French they knew, but even that was something.

The old ones lay still and meditate l; the little ones were very busy, and never quiet. One little porker in particular had a twist in his tail, just like a ring, and this ring was his mother's pride. She was always looking at it, and she thought all the rest were looking at it, and thinking only of that ring. But they were not; they were thinking only of themselves, and ot what was *useful*, and of the *reality of things.*

They had always heard that the acorns grew under the trees, and so they grubbed up the ground. But there came this quite little pig—it is always the young people who start these new-fangled notions—and he affirmed that it was no such thing; they fell from the branches, for one had just fallen down on his head; the idea struck him at once, and he had made observations, the result of which was that he was quite certain on this point. The old ones put their heads together over it. "Humph!" they said, "Humph! we only want the acorns; whatever is *good to eat* is good, and we can eat anything." And all the rest cried, "Oui! oui!" and the little philosopher got no thanks. But the mother—she looked lovingly at her little porker, the one with the ring in his tail. "With all this, one must not overlook the beautiful," she said.

And the rose-king still sat in the cold, damp weather, and sighed, "Gone, gone! all the beautiful is gone, and the pigs are the lords of the forest!" But the old mother sow thought that was not right. "There is always *somebody* who has a soul for the beautiful," she said; and she looked again—*so* lovingly!—at her little porker with the twist in his tail!

These "fancy points," then, are to our amateur what the "twist in his tail" was to the mother of the little porker. To lose them would be to break his heart; he admires them and loves them, and were it not for their sake he would never pend the time, and thought, and money he does in maintaing those breeds, which without him ould be lost, and the loss of which would be irreparable.

We have thus shown how "the knowledge, enthusiasm, and patient perseverance of the fancier are necessary to improve and maintain any breed in perfection for even the utilitarian." But it may still be asked, If in the fancier's hands these breeds have *lost* some of even the original economic value they had, how then? The answer to this also is very simple, and consists in the fact that however much these qualities have diminished, the usually reappear in all their original perfection *in the first cross;* and as farmers or market-breeders usually employ such first crosses, which are better for nearly

all purposes, every practical end is still secured. Thus, supposing a strain of Brahmas to have deteriorated in laying, and a strain of Houdans to have suffered in the same way, through long breeding to merely fancy standards, and omitting to select the best layers; the chickens produced by *crossing* these two families will in almost every case reproduce the faculty in all its original perfection. This is a fact we have seen often, and it further establishes the truth demonstrated by Mr. Darwin on other evidence,* that "the very act of crossing gives an impulse to reversion, as shown by the appearance of *long-lost* characters," and the destructive effect of which on his own well-known theory of development it is very strange that this eminent naturalist does not see.

As we have said in our last chapter, the improvement of any breed in laying or other *useful* qualities is, however, equally possible with the development of mere fancy characteristics; and though this matter is entirely in the hands of market-breeders themselves, we are far from denying that shows and fanciers might do more than they have done in even these respects. To give prizes to the best layers we have seen would be impossible: the matter could not be decided in the show-pen itself, and to determine it by evidence would be in many respects unsatisfactory. But a class for the largest and finest cross-breeds for the table might yield good results; and in one particular breed—the Dorking—the disqualification of all birds which showed a yellow skin would be a very useful reformation. Prizes for dead poultry might also in our opinion, be given a much more prominent place at all our shows than they now have, with marked effect upon the quality and size of the fowls sent to market. This is the really *weak point* in English shows; and as it is the exhibition of fat poultry which have had so great a share in the improvement of French table-fowl, so we believe the recognition of this practically new element would produce in time an immense effect upon English market-stock likewise. Let people see at at every poultry-show really first-rate and large fowls as dressed for the table (spit), and they will soon begin to be more fastidious about those they buy for themselves. At present this stimulus does not exist, and the providing it, may and should be pressed in every possible way upon show committees.

* "Variation of Animals and Plants under Domestication."

Making Cats Useful.

From *Land and Water* we take the following:—"It often appears to me that people for the most part are not aware of the great use cats are to us. Of course, we know of their use with respect to mice and rats, but do we generally know of the invaluable help they can give us in protecting from the birds our garden fruits and flowers? The late heavy rains this spring have given us the promise of abundance of strawberries, and in the south, at least, the bloom is magnificent. To keep off the birds how simple, how certain, how small is the cost of a cat on a small chain sliding on a wire, and giving the animal the walk up and down the whole length of the strawberry beds. A knot at each end of the wire readily prevents the cat from twisting round the post which supports the wire, and a small kennel placed in the middle of the walk affords her shelter, and a home for her kittens. In large gardens a second cat is required, and the young ones in their frequent visits to each other greatly assist in scaring away the birds. I have for more than thirty years used, and seen used with perfect success, this easy method of protecting fruit, and the very same plan is equally good in keeping hares and rabbits off flower-beds. After the first few days cats in no way dislike this partial restraint, and when set quite free, after a few weeks' watching, they will of their own accord continue on guard. The kittens, more especially, attach themselves to this garden occupation, and of their own accord become the gardener's best allies."

Prairie Dogs.

A correspondent of the *Prairie Farmer*, writing to the juvenile readers of that paper about prairie dogs, says, "They look very much like red squirrels, with their ears cropped close as a hen's and their tails cut off to three inches long. They live in houses, or holes, in the ground, and usually in 'towns,' where large numbers are found."

"Each family has a house to itself; and such houses! They dig holes in the ground, sometimes quite deep, and always very crooked, and at the top they make mounds about the size and shape of an inverted bushel basket, leaving a funnel-shaped hole in the middle, for a doorway. It is hard to get hold of them, for they always run to the mounds at the first intimation of a person approaching, and, if shot, they fall into the house out of reach; but if not they dive down in a very amusing manner."

"At times they are real playful, and will chase each other around for a while, then set up on their hind legs and make a chuckling noise like laughing, or stand erect on their hind feet and give a squeaking challenge for another race; and off they go. I have often stopped my oxen and sat on the plough to watch them in their antics, and always with increasing pleasure. It took me some time to learn about their ears, for they are hard to get acquainted with. Sometimes I thought they had none; at others, that they had, but kept them laid back like a cross horse when I was near. But after a while they seemed to lose their fear, and would play all sorts of pranks when I was within a few feet of them.

"They eat the grass roots from their fore paws as a squirrel does nuts, and I have known them to eat the young corn that was growing near their town. They are not model housekeepers, for they always leave their doors open, which must cause them considerable trouble, for I have seen several owls and rattlesnakes go into and come out of their houses, and I believe they kill and eat the dogs. But in one respect, at least, the boys and girls would do well to imitate them, that is, in never being seen in the streets after dark. As long as I have known them, I never saw one after evening set in, and I am sure the boys and girls who have the good old *Prairie Farmer* to read, have something better than street-walking after dark."

A PAPER gives the following directions for using its new patent hen pills: From one to ten boxes of pills is a dose for young fowls. The best way to give the remedy is to tickle the chicken under the wings until it laughs, when the medicine can be shot down its throat with a musket or horse pistol.

A Cheap Poultry House.

We again present our readers with another new and original design for a cheap, tasteful, and convenient poultry house. It is specially suited to cold exposed situations, or to northern latitudes; the walls being of brick, stone, or of concrete, whichever is preferred, or most easily obtained.

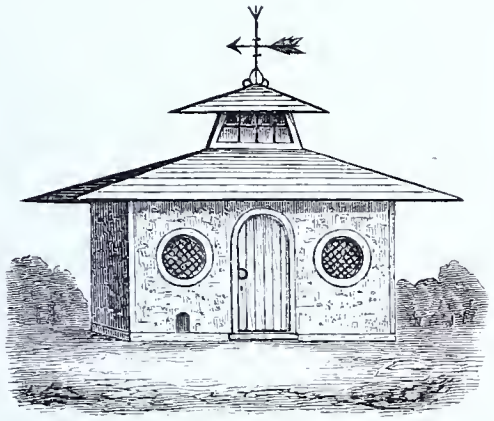


Fig. 1.

Fig. 1 is a perspective view, showing the front of the house. The walls are 6½ feet high to the eaves; the main roof has a rise of 2½ feet to the bottom of the cupola, which is three feet high, the roof taking one-third of that distance, making the total height, from foundation to peak of cupola, 12 feet. The sides of the cupola are glass, above which is a latticed space for ventilation. The building is 12 feet square inside; walls are supposed to be about 8 inches thick. Fig. 2 shows the ground plan of the building, "a" being the entrance door, and "b b b" the windows, which are provided with lattices for summer use, and glass for winter. The floor may be either cement or earth. Fig. 3 is a vertical section of the inside arrangement—"d d" is a shelf 2 feet wide, extending round three sides of the building, and raised about 2½ feet from the floor; above this shelf are the perches "p p," and under it are placed the nests at "g g." At "c" is placed the water fountain or pan. This may be placed on a stand elevated one foot or more above the floor, so that the dust and dirt will not get thrown into it. At "h" is a swinging drop-door to close the building in extremely cold weather, if required. The floor of the house should be covered one or two inches with dry earth or sand; the latter is preferable, as it does not create much dust.

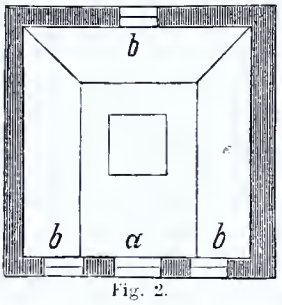


Fig. 2.

While erecting the walls, wooden studs should be built in, so as to afford a hold for nails and screws, used in putting up shelves, nest, &c.

A house of this size will, "on a pinch," accommodate one hundred and twenty-five fowls; but fifty is about a fair number to retain health, and make the most profitable returns. In a warm climate a house like this might be built entirely of close lattice work, with a thatched, or other cheap roof, and, in our opinion, would be found to answer a very good purpose. The principal objection we have to a house of the latter construction is the almost utter impossibility of getting rid of lice, if they once make an entrance there.

For the plan of the above we are indebted to Mr. J. F. Cass, L'Orignale, Canada.

Alternating Cocks.

Editor Bulletin:

I desire to repeat a suggestion I made some months ago in the Bulletin, that those who keep two cocks should shut them up alternately for a few days. The eggs will be better impregnated, and consequently more likely to

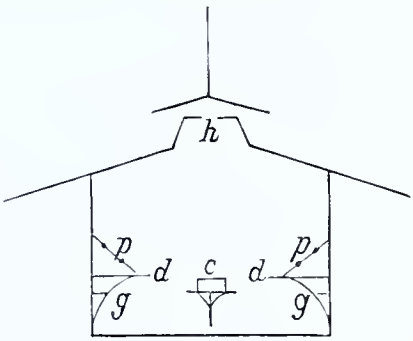


Fig. 3.

hatch. My experience of this year with black Spanish, generally regarded as difficult to impregnate, has been eminently satisfactory. In many cases all the eggs hatching, and in no case reported less than seven out of twelve. The average, except when transported, being about ten. No process will cure a hen from sitting so effectually and quickly as putting her in the cage with a cock, and this plan furnishes every facility.

There has been considerable complaint about here, of eggs failing to hatch during the season.

Louisville, Ky. Q.

An English Lady, traveling on the Rhine, recently drew the attention of a waiter to the fact that the egg he had given her contained a chicken. Nothing abashed, the waiter replied that he must charge for a chicken in her bill, instead of an egg!

Artificial Incubation.

(*Continued from page 49.*)

"I have been led by slow degrees to adopt the opinion that the great drawback to artificial incubation was the difficulty in getting through the first ten days. I noticed some years since that when a hen left her nest, and the eggs were fairly chilled, during the *early* stages of incubation, she rarely brought out any chicks, and usually those that did come forth were weakly and pined away a few days or weeks of existence, and then dropped off. Also, that even when eggs had been left for fully twenty-four hours during the latter days, they often hatched out well and strong.

"In support of this view, one of my neighbors, a perfectly reliable gentleman, gave me a remarkable instance. He had a large number of turkey eggs set under common hens; under one of the hens were some eggs of her own kind, probably laid to her by one of the fowls roaming over the place (they not being confined in a setting room). These hens' eggs hatched, and the mother left the nest with two chicks, leaving ten turkey eggs about twenty-three or twenty-four days incubated. When found the eggs were cold and supposed spoiled: no further notice was therefore taken of them until two or three days after, when a hen was found to have taken possession of the nest and assumed the duties of incubation. Some days after, to the surprise of all, she came off with *seven* turkey chicks, all strong and well This was in June, warm weather. Since then I have experimented with eggs, and have demonstrated to my own satisfaction that eggs can be, at certain stages of incubation, deprived of heat for twenty-four to *seventy-two hours*, and yet be hatched. In fowls this period would seem to be about the sixteenth and seventeenth days; in turkeys, the twenty-first to twenty-third days: perhaps even later. The exact time I have been as yet unable to determine.

"My experience with this led me to try placing the eggs under hens during the first few days of incubation. I have found even three days under hens before placing in the incubator a great benefit, but seven to ten days is much better, and one reason I believe to be the following:—If my reader will notice an egg after having been under the hen for a few days, he will observe it to have a *polished* appearance, as if *oiled* and *rubbed*. There seems to be some oily secretion on the feathers or on the body of the hen, which, with her action in moving the eggs, produces this appearance. Eggs thus treated seem to retain the moisture or watery portion of the contents much longer than perfectly fresh ones; hence it would seem that the 'greased appearance' prevented or rather retarded evaporation. An egg placed at first in the incubator and left there the same time has not this appearance, being as fresh to all outward seeming as if just laid. To establish this fact of evaporation, I took eggs of equal weight and placed some under hens and the rest in the incubator, subjecting the latter to a dry heat. At the end of three days there was a discernible difference, and at seven days a very marked difference in the weight; at ten days there was *over half an ounce* difference in their respective weights. It is in consequence of these discoveries that I so strongly recommend the constant application of moisture during artificial incubation: and knowing how easy it is for a novice to overdo or come short in the matter, I recommend the use of hens for the first seven to ten days.

"It would be very easy to give a page or more of directions "how to manage an incubator,' but all the written directions in the world will not give some men success. Nothing but experience, and that bought with many failures, will teach them the *little* attentions necessary to ensure success. I have striven to give these plainly, and if any of my readers are benefitted by it my labor will not be lost."

Interrupted Incubation.

In *The Field* we find the following:—"On the 18th instant a hen of mine hatched out a chicken, the egg having been out of the nest for fifteen hours, viz., from 8 p. m. on the 14th till 11 a. m. on the 15th. The egg was one from a stolen nest in a hedge, and belonged to a neighbor of mine, the hen being required to sit on pheasants' eggs. The egg was from 8 p. m. till 11 p. m. in a china bowl in the drawing room, and afterwards in a cupboard behind the kitchen, in which the fire was just dying out, the door was open, and, being close to a back entrance, far from a hot situation at this not very genial season. Strange to say, the chick was so strong that, although the egg was accidentally crushed in removing some addled eggs, and bled through the shell, on releasing it from its confinement it seemed quite as strong as the others, and is now in perfect health. I may add that there was no mistake about the egg, as it was the only white one in the nest, the others being Brahma, and the hen a Brahma. The chick was a little black mongrel, similar to those kept by my neighbor, and, as I released the bird from the shell, I could not be mistaken out of which of the eggs it came. What is the longest time on record of an egg hatching after being deserted by the hen?

A Venerable Hen of our acquaintance, says the Camden (Ark.) *Journal*, after six weeks of arduous and unremitting effort, hatched fourteen turkeys and two ducks from one egg-plant and four onion sets. The mother is doing as well as could be expected.

OUR RABBITRY.

Rabbits as a Food Supply.

Upon this question there is a diversity of opinion. A great deal has been said without that practical experience which alone can give weight and importance to the various statements. If the rearing of rabbits under domestication can add any material quantity to our animal food supply, it ought by all means to be tried by those who have the opportunity of making the experiment. The question, can rabbits render any important service towards materially lessening the scarcity of animal food, may, I think, be answered in the affirmative to some extent; yet, I should not expect to be able so to glut the market as to bring down the price of the more general food, beef and mutton, to that of years ago. We all know that the numerous warrens in the United Kingdom send forth tons of rabbit flesh weekly during the season, yet some of these specimens are very small and weak, by reason of the "in and in" breeding which has gone on for years; but a more frequent interchange of stock would, to a certain extent, obviate these two important defects. If I were to advise what change to make as an improvement, I should suggest the introduction into the warrens, of animals of much larger size after they had been reared to six or eight months old in a semi-wild state, or, at least, in hutches at a lower temperature than ordinary, by way of preparation for their life of exposure; but perhaps the most successful experiment would be to introduce the Belgian hare rabbit. It is large, 7lb. to 10lb. say (I have seen them a little heavier), and as they are of a docile disposition they would soon become on good terms with their newly-acquired companions. This large variety may be kept for house use, either in the hutch, or inclosed yet semi-wild state, and I know several who have tried the experiment, and with satisfactory results. My experience proves that the larger variety consume but very little more food than those not much more than half the size. I keep all varieties, and closely notice this particular amongst the many others. The larger varieties are undoubtedly the most remunerative in a commercial point of view. It may be said that the small varieties of common rabbits, tame or wild, are more prolific, and so if smaller they are more numerous as a total per annum. This I rather question, as I have large Belgians which frequently bring from eight to eleven at a litter. I think the only way to fairly test the matter is to consider the cost of keeping, say 100 rabbits of the small size, and the same number of the kind I allude to: I think the difference in cost will be trivial, yet the amount of food for the table just the reverse. I at times increase the size for the table by a careful crossing with a variety larger than the Belgian hare rabbit. Rabbits for ordinary purposes might be kept to advantage in far greater numbers than they are: and they would amply repay their keepers for the small amount of care they require, and the trifling cost of the food, by furnishing an agreeable and wholesome food at a cheap rate. I concur with the opinions of some that the butcher's bill ought to be lessened in many a working man's home by a more extensive rearing of rabbits for the table.—*The Bazaar.*

Rabbit Trade of Belgium.

It is almost incredible to what a degree of importance this branch of industry has attained in Flanders within the last few years. There are over fifty thousand skinned carcases of these animals exported weekly to England during the summer season—or more than two and a half million annually—where they find a ready market as articles of food; while it is difficult to sell them in Flanders at half the price they bring in the English market. The preparation and coloring of the skins gives employment in Ghent alone to more than two thousand workmen.

Should Rabbits have Water.

Mr. S. W. Crook, *Mass.*, is in a quandary. He says, "In the book 'Pigeons and Rabbits, which I got of you, giving rabbits water *is positively forbidden;* but it says give them salt, which, I should think, would make them thirsty. The writer of the article in the Bulletin for Dec., 1871, says, 'Give free access to fresh spring water.' Now which is right?" Our correspondent in the June number of Bulletin answers this question very fully. We will say, however, that we give our breeding does water in quantities of about a gill once or twice a day, for a few days before and after kindling; at that time they are disposed to be feverish, and water may be given without fear of injury.

Poultry manure, or hen guano, is worth, if kept under cover, almost as much in price as Pacific guano, which is selling at $60 per ton. Hen manure, on the garden or farm, is worth $50 per ton. To prepare it for use, mix it with soil, half and half; keep it till wanted. For corn, onions, and all vegetables, it is one of the best manures. No farmer, who wants to make his farm pay, should sell it for twenty cents per bushel. It is worth $1 for his own use.—*Our Home Journal.*

Pedigree Fowls and How to Breed Them.

EDITORS POULTRY BULLETIN:

GENTLEMEN—I was much pleased with the article under the above title, written by Mr. I. K. Felch, which appeared in your issue for May, and was rather disappointed, on receiving the June number, that none of the gentlemen mentioned by Mr. F. had taken the matter up.

As I consider it a subject of paramount importance at the present state of fowl breeding, where the different breeds have been brought to such a general state of excellence, and the several Poultry Societies are established on firm foundations, and make such fine displays, I write this article to do what I can to "help the matter along."

I do not propose to commit a plagiarism upon what Mr. F. has written on this subject at various times, but will say a few words in connection, and mention my method of recording fowl pedigrees.

In breeding my Pedigree Houdans the present season, I have a case which bears upon what Mr. F. says in regard to buying "an exhibition fowl that is the admiration of a crowd," &c. I make it a practice to retain nothing that is bred from imperfect parents, but waived my rule in the case of one of my last season's pullets, apparently perfect in herself, with faultless fifth toe, but out of a hen with imperfect toes; and waited with considerable interest to see how she would breed. I have now eight chickens from her, and not one of them has perfect fifth toes, which shows an innate predisposition to breed back to the grandparents. I have no doubt that these chickens would breed others, a large percentage of which would have perfect toes, and shall probably keep one to further prove this principle. I state this case in deprecation of the practice of buying an exhibition bird without knowing its pedigree.

It would be applicable on this subject to say a word about the tendency of Houdans to breed four toes. This I consider is traceable to their Polish blood, as I think it indubitable that they were originally produced by a cross of one of the bearded varieties of Polish on the Dorking. In this cross the two breeds seem to have divided honors about equally, the progeny retaining the crest, muff, cavernous nostrils, and the tendency to the bifurcated comb of the Polish, and the Dorking giving the wattles (the bearded variety of the Polish having none), the disposition to develop the comb, the fifth toe, large size and prominent breast in the matter of *points*. To these may be added the *qualities* of hardiness, and fecundity of the former, and the quantity and quality of meat supply of the latter. The broken black and white plumage is almost conclusive proof that the breeds were bearded white-crested black Polish and white Dorking. The yellow tinge, common on the latter, will account for the straw color on some Houdans. Besides the mixture of the black and white plumage, the shaded lead color, or broken flesh and lead color of Houdans' legs, are a combination of the dark leaden blue of the one, and the white of the other. One of our Eastern breeders raised some pullets last year, a cross of a Polish cock with Houdan hens, making very dark pullets, but with five toes. This year he is breeding a very light Houdan cock to them. He says, "I think the result will be a new strain of Houdans, and very fine ones at that." Now, although I like to see enterprise and encourage experiments, I do not see what possible benefit would accrue from such a cross; the only effect I can think it would have, would be to decrease their size, give them more black in their plumage, therefore making a more uneven color, and increasing their pre-disposition to throw four toes.

It would be far more worthy of praise, in my opinion, to take what we already have had done for us in the improved breeds, and making an ideal to breed to, then, by selection and careful breeding, keeping this ideal in view each season, bring them up as near as possible to this conception you have formed for realization. Thus, by naming the birds used as stock getters, which, of course, were those of the greatest excellence, and registering them by whatever method may be selected, we breed to a pedigree.

I record my pedigrees by two forms. One I call the "Narrative Pedigree," and the other the "Tablet Pedigree." In the former every bird which it is desired to register is entered, beginning with the earliest ancestor, numbering each in the order recorded, stating the year bred, got by and out of whom, whether exhibited or not, the prizes taken, and in fact anything which is thought worthy of mention. This method is necessarily very voluminous, and much more difficult to look up the pedigree of a single bird than by the second method, which contains only the progenitors of a single pair, or trio.

This "Tablet Pedigree" I will merely mention, as I have already written more than I had intended. In a future article I will say more about it, when, perhaps, the BULLETIN will furnish a diagram to illustrate, and make it better understood.

I think if some of our breeders were to commence the present season, and make a pedigree on their fowls, they would find much pleasure and interest in so doing, and would be more than repaid for the trouble it would occasion them.

Boston, Mass. GEO. F. CLARKE.

COLUMBARIUM.

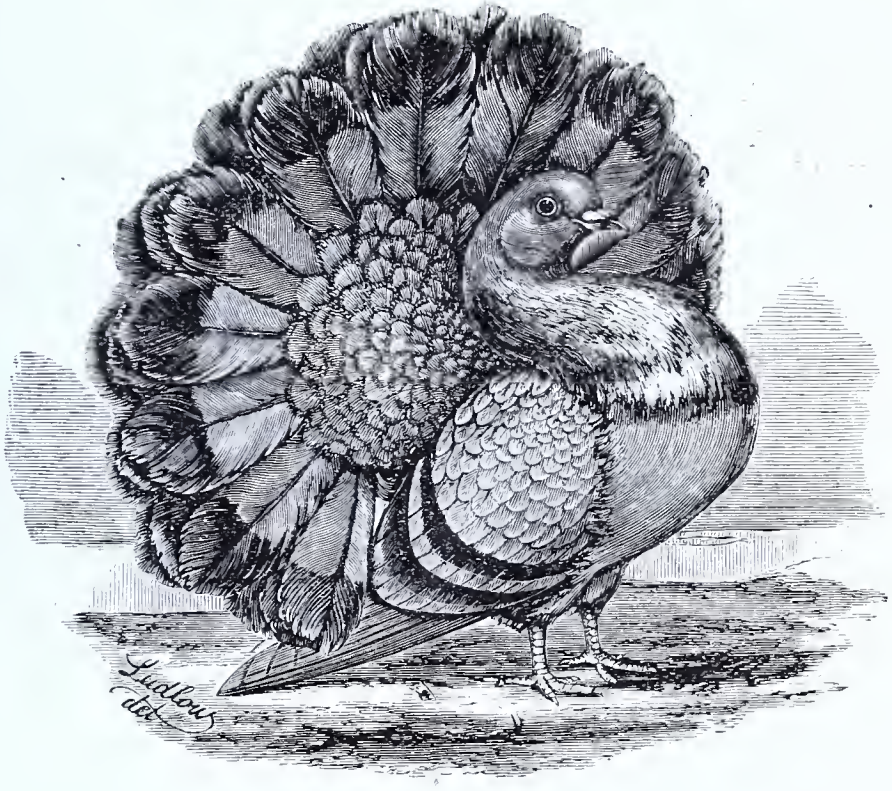
The Fantail.

THIS peculiar variety takes its name from the broad, erect, and fan-like tail which it possesses, and by which its body is partially covered.

Fantails comprise a very numerous class of pigeons, and they seem to be a *universal* breed, having been found in all parts of the civilized world where pigeons are now, or have been kept; so that it is altogether a matter of conjecture and question as to the actual place from which they originated. Nor is this a material point, even though the problem were solved. We know well, by ancient record, that fantails (nearly approaching the present standard) have been abundant amongst us for centuries.

In England and Scotland, perhaps, the *best* are to be found. The native birds of these parts have been carefully bred, and judiciously crossed with foreign specimens from time to time; and by such means the cardinal properties of the bird have been not only maintained, but improved thereby, without the stamina giving way, or the stock in any way degenerating; so that by a wise provision of Nature herself, and man's skill and knowledge in natural history, the fantail has, like most other things, improved by the process of time, and approached a little nearer to perfection, though, we believe, in a less degree than most other of the beautiful pets of pigeons, in which we take delight.

By records of the past century we are informed that fantails were rarely to be found with thirty-six tail feathers, and that was the maximum number to which they had attained; but that amount is now considered about the average, though the actual breadth of feathers of birds of the present day is greater than the fantail or "shakers" we read of, in consequence of which the tail appears much larger; but



THE FANTAIL.

apart from this consideration, we have seen several specimens possessing *forty-two broad feathers*, and being also otherwise perfect. These immense-tailed birds, of course, are the exception to the rule, but they *are* to be found.

Many splendid specimens of fantails have been imported to us from India, from which we are assured that in that climate some of the *largest tailed birds* are to be found; and from time to time these importations have served as great acquisitions in propping up and improving our native stock. Some of these specimens have "peaks" at the back of the head, similar to the "Archangel," or "Turbit." This peculiar head-dress to the fantail, however, is no adornment; it is not wanted; but the breadth of tail and strength of constitution which for-

cign stock impart to our birds makes it very desirable to obtain such an advantageous cross. The foreign fantail is not so slender in shape, or graceful in its movements, as our native kind. Neither do they possess the shaking or tremulous motion of the neck we like to see, nor is the neck so long or so thin and well carried. But, notwithstanding these differences, the Eastern products are of great value as stock birds, the defects of which may easily be "bred out," and other good points retained. The zealous and well-practiced fancier knows well the importance of a "cross." The infusion of fresh blood is a means whereby life and vivacity are maintained, and disease and premature death kept in abeyance. The real fancier knows well, too, the great damage sustained by "close-breeding." The losses we suffer from this cause are incalculable. The effect is too often attributed to other reasons, without our reasoning powers being exerted to divine the actual cause. We do not *altogether* condemn close-breeding, for, under certain circumstances, it is advantageous, but should be resorted to only in the endeavor to obtain a special object, such as experimental breeders sometimes have recourse to. Fantails, therefore, should be crossed with fresh specimens of the tribe, or they will degenerate at *all points;* indeed, they will become lilliputian "shakers," too shaky, indeed, to stand upright; too weakly to bear a good tail, and unworthy to be regarded as either fit for the show pen, or the pie.

Fantails are of six recognized varieties, which are as follows: *Blue, silver, white, black, red,* and *yellow.*

Our accompanying engraving was specially prepared for us, and is a correct representation of a notorious living Blue Fantail, remarkable for the very near approach to perfection in all points, and therefore selected as a model. A brief description may suffice to give an idea of a perfect bird. "Blue" should be of a clear and uniform color throughout. They should have two black bars on each wing, and a band of black near the edge of the tail. The eyes of this kind are either of a yellowish red, or a "pearlish" color; it is not of much importance which, so that the pair are a *match;* but from choice, *we* prefer the former. "Silvers" are of a very light and delicately-colored ground tint, a sort of grayish drab. These also, like the blues, have black bars on wing, and black band on the tail; other "flights" being of a darker drab. Whites, it is needless to say, should be *entirely white;* any colored feathers thereon is a blemish. A pure White Fantail, of high merit, and in tip-top condition, is a charming pigeon, and commands a high price amongst fanciers. Blacks, Reds, and Yellows may be alluded to collectively; each variety should be of sound or solid color throughout their entire feathering. "Blacks" as black as possible; they are generally of a bluish black, though we have seen some admirable specimens of a *jet black* color (if such it may be called), without the semblance of a bar on wing, or band on tail; in short, intensely black. "Reds" must be of a *clear* and *uniform color*, and "Yellows" the same; *any* variation of tint is objectionable, though it is a blemish too often met with, but 'tis no less a glaring defect. *Back, tail, flights,* and *thighs* frequently show a tendency to a slaty color, or oftentimes a lighter color is observable. *Reds, Yellows,* and *Blacks* are scarce, therefore we would urge fanciers not to discard birds of those varieties for trifling defects, but rather take greater interest in them; for such birds as *are* defective, and need improvement, should be special objects for our cultivation; and by offers of larger premiums at our shows, the fancier might be encouraged to try to raise such to the state of perfection at which the other colored "fans" are raised.

We will now give the *general* properties of "fantails," such as applies to *all the varieties.* The head is somewhat dove-like; the beak long and of the "spindle" character; the "wart," or nostril cover, *small;* the fore part of head high and prominent; the neck *long, thin, gracefully formed,* and well thrown back; the *breast* very prominent and upturned; the *wings* drooping, with point to point, and almost trailing upon the ground. The back should be short, forming a segment of a circle, and in line with the base of tail; the latter appendage should be *large* and *outspread,* well balanced, and partially overhanging the entire bird; the feathers of which it is comprised should be *wide* and *long,* ranging from 26 to 42 feathers, all of which should be radiating from its apex in a circular form, the end feathers pointing downwards, and as close to the ground as possible; the neck of bird should come in contact with the centre of tail, but by no means protrude, as is the case sometimes. Fantails should have a tremulous, shaking motion of the neck. This eccentric movement is peculiar to the breed, and ought to be looked for, and always found in good stock.

Good specimens will strut about on the tips of their toes, quivering and shaking as they go, and in their pride displaying the immense outspread rudder by which they are adorned, and which is so singular, yet the great characteristic of the breed.

There is probably no variety of pigeon which provokes more criticism than the "fantail." They are a most difficult class to judge. *Individually,* they may soon be reckoned up, but to make the awards in a well-filled class of "fans" is by no means an enviable task, and

the most accomplished authorities will often change their ideas as often as they walk round, from the simple fact that the birds themselves are ever changing; at times showing up their good points to advantage, at others looking as second-rate stock, and even condemned by their owners. But for all this, the fantail remains a favorite amongst us, and is likely to be so as long as beautiful and novel specimens of the pigeon tribe are appreciated.

Birmingham, England. J. W. LUDLOW.

Pigeons Tumbling—Is the Action Voluntary or Involuntary?

A writer in the *Journal of Horticulture*, after stating his belief that it is involuntary, says:

"In case it may be thought that I make the above statement with an imperfect knowledge of the subject, I may state that although my observations have been made chiefly on one variety of the tumbling bird, yet that there is in it a sufficient field for accurate investigation may be gathered from the fact that I have, at different times, possessed birds in which all the aftermentioned peculiarities had been noted.

"1st. Of birds that would only tumble when high in the air, I have had some that did so frequently, others only seldom; some that did it without dropping apparently in the slightest, others where the tumble was always followed by a heavy fall downwards; some where the performance was noiseless, and others where it was always preceded by a loud flapping of wings; many where the tumbles where always single, and only one that I recollect of, which rolled, which I understand means a number of turns without any clear or distinct break between each.

"2nd. Of birds showing marked individual characteristics I had one that could come down from a height of 6 feet or so outside, only with a roll of three or four turns, and to get up to the same height would have first to make three or four futile attempts; yet the same bird, although nesting at a greater height inside, I never knew to tumble or roll in the loft, and also if taken to some little distance from home would rise right into the air, and get back without giving a single tumble. In contrast to the preceding, I had another which would fly from my courtyard to the top of my dwelling-house with perfect ease, but if taken into my garden, which was only separated from the yard by a wooden railing not more than three and a half feet high, no matter how close to the railing, it could not fly over for tumbling. One I had which tumbled very well inside the loft, going clear over, but outside when high in the air only backed. Some I have had which would occasionally tumble well inside the loft, particularly when going to nest, at other times not at all; others I have had which would tumble any hour of the day and any day of the year.

"I have watched all carefully, have studied their various peculiarities with minuteness, and where possible have applied tests, the result of which is, that no matter how easily the tumbling may be done, or how seldom, I am thoroughly persuaded that not one of them does it when it can help it. That good flying Tumblers become quite indifferent to it, and acquire both skill and confidence in catching themselves up again, I quite admit; but whether the cause be a giddiness in the head or not, I cannot say (but incline to think so from having seen some House Tumblers when too much flurried, show a slightly tremulous motion in the head and neck), but that the cause is the same in every case I am thoroughly satisfied."

The Reconciled Swans.

A correspondent of *Land and Water* writes from Paris: "The history of these two swans, to whom, two years ago, was given the name of the "reconciled," is rather pretty. They were, it appears, the whitest and most beautiful swans in the lake, and as such were much admired and petted by all the *habitués* of the Bois. One day the female was seen sailing proudly along with a brood of young ones on her back between her half-raised wings. From this time it was noticed that the male ceased his attentions to his mate, and took to flirting with the other inmates of the lake. The former favorite, however, no sooner noticed this than one morning she disappeared with her young family, and for a long time could not be found. At last, however, she was discovered in a far-off lake, little known by the general visitors to the Bois. The faithless swan at the great lake, in the meantime, appeared totally indifferent to his spouse's absence, and he continued flirting to his heart's content. He appeared entirely to have forgotten his old love. At the end of a month, however, a change was seen to take place in his appearance. He refused the bread which the ladies and children offered him, and ceased to plume himself as formerly. It was easily seen that the coquettes of the lake had ceased to charm him; he noticed them no longer. A few days afterwards he also was missing. He had disappeared during the night, and had actually searched the Bois until he found his lost mate. Matters were soon made up after this, and husband, wife, and family were again seen on the lake, and more affectionate than ever. That is why they were called the "reconciled," and that is why the *habitués* of the Bois are so anxiously looking out for them."

Keeping Eggs for Winter Use.

The following excellent recipe is from *Wright's New Illustrated Book of Poultry*: "To four gallons of boiling water add half a peck of new lime, stirring it some little time. When cold remove any hard lumps by a coarse sieve; add ten ounces of salt and three ounces of cream of tartar, and mix the whole thoroughly. The mixture is then to stand for a fortnight before using. The eggs are to be packed as closely as possible, and to be kept closely covered up. Thus treated, if put in when new-laid, at nine months they will eat quite as good as though laid only six days, though of course not quite like *new*-laid."

FISH CULTURE.

E have just received the Fourth Annual Report of the Commissioners of Fisheries of the State of New York, closing with the year ending December 31, 1871. By it there appears to be a great increase in the yield of shad, both in the Hudson and Connecticut Rivers. In the latter especially the yield was so great that the markets were glutted, and the wholesale price was reduced from $18 per 100 to $3. As it was exactly three years since Mr. Seth Green turned the millions of young fry into that river, his predictions that they would return full grown in three years time was fully verified.

During the season of 1871 shad eggs to the number of 8,915,000 were taken, of which 8,295,000 were hatched, and turned loose in the Hudson.

The Commissioners hope that in a few years the fisheries will be so improved that 500,000,000 of fry will be artificially hatched annually, which will produce a yield that cannot be diminished by any ingenuity of man. To obtain this result the Commissioners memorialized the Legislature to pass an act preventing all taking of shad from sunset of Saturday night to sunrise on Monday morning, thus giving the breeding shad a chance to reach their spawning grounds in the upper waters. This seems to be an essential enactment, as in obtaining the number of eggs above given not more than one-eighth of the shad taken were "*ripe*." In the month of May 1,004 shad were taken at the hatching house at Caledonia, and of these only 128 were available for breeding.

Speaking of the State hatching house, the Commissioners say:

"It is neither a very large nor a very costly establishment, but is the most efficient, practically, and the most productive in results of any in the world. The water is introduced in the ordinary way, through a number of flannel sieves, and is led into twenty-four troughs, which are sixteen feet in length by fifteen inches in the clear in width. These troughs are raised about two feet from the ground, so that a person sitting on a stool alongside of them can readily examine the condition of the ova during the period when they are hatching. The lower end of the trough is an inch lower than the upper end, so as to give a gentle motion to the waters introduced into them. The water flows from a spigot about an inch in diameter, and through another flannel screen, which is an additional protection against the accumulation of sediment.

The troughs stand in pairs, so that the workmen can easily overlook them by passing on each side through a passageway left for that purpose. They are divided into compartments at every two feet, and at first, when the eggs are being hatched, the water running through them is only about half an inch deep. The moment, however, the fish are out of the egg, screens are introduced at each compartment, and a piece of board being put across the lower end of the trough, the water is raised to about three inches in depth.

The water in this brook is peculiar. It remains at substantially the same temperature throughout the year, never growing warm in the summer nor cold in the winter; and another peculiarity is, the abundance of natural food which it contains. Every bar and stick and stone that is covered or washed by the water is alive with caddices, and every bunch of moss or piece of weed is filled with fresh water shrimp or other minute insects. The stream, even in its natural condition, without the assistance of any artificial propagation, has produced enormous numbers of trout, and at the present moment, although it has been greatly fished, it is fairly alive with them. No better place, therefore, could have been chosen to put up the State establishment than the one selected, and it is only to be regretted that this natural curiosity should not be purchased by the State, and held for general uses, as it is only a mile and one-fourth in length from its source to its mouth.

The State hatching-house has been greatly enlarged the past season, and operations for the winter hatching of fish has been commenced on an unprecedented scale. Millions of the spawn of salmon trout were taken there from the great lakes to be distributed through the State, or to be developed and then distributed. It is much easier and less expensive to distribute the ova than the young fishes. The ova may be transported anywhere during the month of December, but no later. More attention than heretofore has been paid to the cultivation of salmon-trout, and less to that of white-fish, for it was found that objection was made to the introduction of white-fish in many of our ponds, on the ground that they have to be caught with a net, and that while they are being taken many other fish which could be caught with a hook and line are destroyed. With salmon-trout this is altogether different; and as they bite readily at a hook, are a handsome game-fish and good for the table, it is proposed hereafter to raise a far greater portion of them, and few, if any, white-fish."

The Reproduction of Eels.

Among the prizes offered by the Belgium Academy of Science for the year 1873-74 we find one mentioned for a dissertation on the reproduction of eels. It may seem somewhat singular in this era of scientific research that we are not yet acquainted with the true method in which the spawning and reproduction of the eel is accomplished. The present hypothesis is that the young are hatched in salt water, and make their way up the rivers as far as they can go for the purpose of spending their period of immaturity, returning, after the expiration of a year or more, to the salt water to lay their eggs, and never again quitting the sea. This movement is the reverse of that which occurs in the case of the salmon and shad, these ascending to

the fresh water to deposit their spawn and then going down to the sea. The assertion is not unfrequently made that eels are viviparous, and that the young can be seen at times in the oviducts of the parent. This is a misapprehension due to the fact that this species is frequently very much infested with intestinal worms like *ascarides*, which occur in great number, and appear on dissection like embryonic fish. We can only hope that the prize offered by the Belgian Academy may be successful in securing a memoir that shall solve what may now truly be called the "opprobrium" of modern naturalists. —*Pacific Rural.*

Pickerel.

EDITOR POULTRY BULLETIN

I would like to say a few words in reply to Fred Mather about the pickerel which he seems to have such a dislike for, but which most of us think a very fine fish. Mr. Mather is undoubtedly good authority on brook trout, or should be, as he is one of the prominent breeders of that delicious fish, and I would not like to dispute anything he might say about *them*; but when it comes to other fish that have not been artificially bred, we sportsmen have probably as good a right to our opinions as the professional pisciculturists have to theirs

He says, in speaking of their fecundity, that there are more females than males, and "among many individuals examined last spring it was rare to find a male, not oftener, certainly, than one in fourteen." Now, we all know that the males of most species precede the females to the spawning ground from one to two weeks, and that the first run of all fish are mostly males, and that they are the first to leave after the spawning is over, leaving only the females on the beds.

As for what he eats, it is not plain that he consumes more than is necessary, or more than the bass, perch, or trout, in proportion to his bulk; and the question of taste is always an open one and hardly debateable, for "what's meat for one is another's poison."

I, for one, consider the pickerel superior to the perch or salmon trout. He is a fine fish to catch, and I do not see the first good reason for his extirmination. If the question of exterminating or protecting were put to a vote among the sportsmen, there is no doubt but that they would all go for protection, even though they might be ultra free trade on the tariff. PISCATOR.

June 10th, 1872.

The Lobster.

When a lobster shakes hands with you, you always know when it takes hold, and are exceedingly pleased when it gets done. They have small features and lay no claim to good looks. When they locomote, they resemble a small boy shuffling off in his father's boots. They are backward, very. They even go ahead backward. They occasionally have a row like other people, and in the melee sometimes lose a member, but have a faculty of growing out another The process is patented both in this country and in Europe, which accounts for its not coming into more general use with the human lobster, so to speak.

A lobster never comes on shore unless he is carried there by force. They are afflicted with but one disease, and that is boils. There is more real excitement in harpooning a whale, or in having the measles, than there is in catching lobsters. The fisherman provides himself with a small hen-coop, and has therein, as enticers, several dead fish. He then rows his boat to the lobster ground (which is water) and sinks his coop to the bottom, anchors it to a small buoy (one from eight to ten years old will do), and then goes home. When he feels like it again, say in the course of a week or two, he goes back and pulls up his poultry house, and if he has good success he will find the game inside the coop.

As an article of food, the real goodness of the lobster is in the pith. Very few persons relish the skin, and physicians say it is hard to digest. We therefore take the lobster and boil it until it is red-dy to eat. Nothing is better for colic than boiled lobster. It will bring on a ease when cucumbers have failed. For a sudden ease, we advise them crumbled in milk. Eaten at the right time, and in proper quantities, lobsters stand second to no fruit known.—(*The Household.*)

THE GLOUCESTER mackerel fleet this season will carry more than 200 seines, worth, with the seine-boats to carry them, $250,000. These nets, if placed in a continuous line, would stretch from Cape Cod to Cape Ann, with a depth of 25 fathoms; and if spread out they would cover a farm of 800 acres. A first-class mackerel seine, 1000 meshes deep and equal to 2000 cords, will pass through a ring 1½ inches in diameter.

THE NEW BEDFORD *Standard* says that upward of 1000 barrels of scup were taken off Seconet Point, Wednesday, 15th, in addition to what were taken in other localities. Of these, 500 barrels were taken by steamer Geo. H. Bradley. Most of these scup are very large, several averaging four pounds apiece. The catch now amounts to millions of these fish a day.

"JOHNNY, where is your pa?" "Gone fishing, sir." "He was fishing yesterday, was he not?" "Yes, sir." "What did he catch?" "One catfish, the rheumatism, two eels, the toothache, and some little ones. Ma says he will catch fits to-day just wait till he gets home."

What is a "Strain?"

EDITOR POULTRY BULLETIN:

DEAR SIR—Will you please explain, through the columns of your paper, what a "strain" is? Of course I have an idea what it is, but it is not a definite one. How are such strains as FELCH'S and PHILANDER WILLIAMS' produced? Are they called such because they come from their yards? or is each strain peculiar in itself, and the result of several years of careful selection and in breeding?

Could I buy two trios, say one from Williams and one from Felch; cross them, and then call the chicks the "ALLAIRE Strain?" I think from these questions you may get an idea of what I want to know.

I have a trio of light Brahmas from an Ohio breeder, and another from an Illinois breeder, both warranted pure, which I am crossing. The Illinois trio lay eggs of a uniform size and color, while the Ohio hens lay eggs that vary from day to day in size, color, shape, and every thing else; in fact, there are hardly two of them alike. All four hens are good size, markings, and well matched in every way. Can you explain the reason for this? The Ohio hens lay eggs one-third larger than the others.

Yours truly, C. B. ALLAIRE.

A person breeding any variety of fowls for a number of years, with the aim and intention of producing certain markings or characteristics, and who does so engraft those qualities on his flock that they are reproduced in their progeny, may be said to have established a *strain* of that particular variety. The term is used to denote that such stock possesses some particular good points or qualities, which are the results of careful breeding, and which, by their almost certain reproduction, are a distinguishing characteristic of such stock. Unless there be some peculiar differences from other flocks of the same variety, shown by transmission to the progeny, the appellation is wrongly applied. A *strain* cannot be established by one or two years' breeding. We very much doubt if it can be in less than *five*, and even after that time a great many of the birds will be far from being good representatives of what the breeder desires.

The Ohio fowls you speak of, in their production of eggs, are a good illustration of this. Were they the progeny of any established strain, there would not be that difference in color, size, and shape. The probabilities are that the Illinois trio are closer bred fowls than the others, which will account for difference in eggs.

Crosses for Table Fowls.

EDITOR POULTRY BULLETIN:

DEAR SIR—I would like very much to know through your very valuable columns whether the white Dorking is superior to the silver gray, cinnamon-breasted ("colored")? I propose, as an amateur fancier, to breed a cross between the "Brahma" and "Dorking." I originally proposed to breed white Dorking pullets with dark Brahma cock, but I have been wavering between that and gray Dorking pullets with a light Brahma.

If not too much trouble, please answer in your next number these two questions:

1st. Are the white Dorkings the best of the Dorking breed?

2nd. Is the cross between gray Dorkings and light Brahmas, in your estimation, preferable to the cross between white Dorkings and dark Brahma? Yours,

Philadelphia, Pa. GALLUS BRITANNICUS.

We do not think the cross between the Brahma and *white* Dorking would be at all satisfactory. Of late years the white variety has deteriorated, and really good healthy stock is scarce. In England, the absence of such at the shows has become so marked that it is feared that they are almost lost.

The cross of Brahma cocks on Dorking hens or pullets does not prove satisfactory. The progeny is usually leggy and inferior. The reverse cross, Dorking cock on Brahma hens, makes one of the finest table fowls we know of. Our own experience has been with gray (or colored) Dorking cock on light Brahma hens, and was perfectly satisfactory. The silver gray Dorking is smaller in body, and therefore not so desirable.

Impregnation of Eggs.

DEAR BULLETIN:

I wish information upon the following:

"I had a hen hatch out upon the 17th of March, and upon the 26th of April (before she had left her chickens and before I *thought* any cock had been with her), I shut her up in a room by herself, where she commenced to lay. Wishing to cross her with a very fine imported cock, and fearing that some cock might have been with her before, I shut her up, I broke the first egg and found a "tread" in it. I have broken the whole six, and found them all the same. Can you tell me how many eggs she is likely to lay before she will lay an egg not impregnated? Is it known how many eggs are impregnated by a cock treading a hen only once? Does it necessarily follow that the first egg or eggs after a hen has hatched out her chicks is *not impregnated?* (I mean, of course, provided no cock has been with her.)

"Am I correct in imagining the small white thread at each end of the yolk to be the "treads"? Can they be there without a cock having been with the hen."

Yours, &c., C. J. THORBURN.

Probably none of the eggs broken were fecundated. That which you supposed to be the tread was doubtless the germ. This you will find in every egg, and, together with the yolk, is formed in the ovary of the hen. By a close inspection you will find that the germ is connected with the centre of the yolk by a narrow duct or tube. The thread-like substances attached to the yolk are supposed to act as weights in keeping the germ uppermost, so as to be nearest the source of heat during incubation.

It has been very conclusively proved that eggs will hatch up to the eleventh day after the hen has been with the cock; therefore, impregnation must continue until that time if not longer. This last is still a debatable question, which can only be definitely solved by a course of thorough and patiently continued experiments.

Intelligence of Birds.

A writer in the *Ohio Farmer* says:—I once saw a sparrow hopping from branch to branch of a rose tree, bearing it down and fluttering his wings a minute, then hopping to another and performing the same seemingly unmeaning prank. Wondering what could be his object we watched him, and observed that he went from branch to branch until the whole had been practiced on, without attempting to pick one atom of food. He knew, however, what he was about. The tree was infested by the leaf-rolling caterpillars. Had he gone to each leaf the vigilant caterpillars would have slipped out at the other end and eluded his grasp by dropping to the ground. He shook the leaves and scared off all the caterpillars, who let themselves down by their silken webs, and he then deliberately picked them up from the ground and appeased his appetite.

WE have seen it recommended that to break a hen that is a *perpetual* sitter, "place a pan half full of water in a barrel, put the hen in, cover it up for twenty-four hours, and see if she don't set *standing*. If that don't break her, break her neck." We most decidedly object to any such harsh measures as that. Would it not be much more easy (and certainly more effectual) to place a barrel half full of water in a pan, and put the hen in *that*. It would not take near so long, and would not have to be repeated.

A SPIDER'S FOLLY.

A spider was weaving the warp and the woof,
As she toiled in the sunshine, one day:
She hung by a single thread down from the roof,
And swung in the breeze, every way.
She gathered her threads with a miserly care,
As she worked in the sunshine and shade,
And stronger the web from the moss hanging there,
Till center and fringe had she made.

She spun with her feet, till the sun grew pale,
And the clouds gathered darkly about;
When the wind from the South changed to blowing a gale,
And turned the frail web inside out:—
Then the spider clung fast, with her fairy feet,
As she hung from the eves in her fright,
Till the clouds were heavy, the rain-drops beat,
With the day fading into the night.

Then, at work in the dark, she kept spinning away,
Each thread gathered tightly around;
Till she found, in the growing light of the day,
That her tiny web reached to the ground:
Her netting of silk was so frail, yet so strong,
That it swung in the freshening breeze;
So she climbed from the roof her light ladder along,
And spread it out over the trees.

Her toilet she made by the rain-drop's glare,
Her mirror, its diamond light,
As she rocked on the pink blossom sweet and fair,
And rested from toils of the night.
She gazed at her work in its gauzy snare,
And watched till the bee came along,
And fluttered its wings in her trap set there,
Thus proving her web was strong:—

The morsel of honey that bee had brought
Was sweet for her morning repast,
And the work of her feet she so carefully wrought
Had served for her purposes at last.
Then, proudly she made her a diadem crest,
And decked herself quickly and neat,
In the stripes from the dead bee's golden breast,
And swung, with the world at her feet.

So, proud of her work and her conquest that day,
Our trim little spider took heed
Of no wandering sparrow, just flying that way,
Herself for his breakfast should need.
So she swung and she rocked in her pride and her state,
Till a rustle of wings sounded near,
When she tried to escape, but discovered, too late,
That her crown and her robe cost her dear.

The sparrow came swooping from out of the sky,
And shattered her flimsy defence;
He snatched her away as he sped quickly by—
This spider, with little of sense.
The vestures the dead bee had given her, then,
Were her death-robes so gaudy and gay;
And the spider was like our own women and men,
Too often by pride led astray.

She saw but the present, nor looked at the end,
A queen, in her airy estate;
Nor heeding the dangers the morrow might send,
Till the warning should come—but too late.

Chas. Chamberlain, Jr.

Maternal Cure.

A correspondent of the *Field* says:—A common barn-door hen, put on ducks' eggs, hatched two. These, after the manner of their kind, coming near a pond, took to the water. The foster-mother, after displaying every sign of anxiety, and calling in vain, deliberately plunged into the pond, swam across, pressing the little ones before her breast, and drove them ashore. Seen by two credible witnesses.

MR. S. R. PHILLIPS, Lake, Ohio, writes he has a Toulouse goose that had laid, up to date (May 20), 40 eggs, and wishes to know if anybody can beat that.

To POULTRY-KEEPERS. Is there any difference between hen-stealing and cock-robin?

The Poultry Bulletin.

NEW YORK, JULY, 1872.

THE POULTRY BULLETIN is *free* to members of the N. Y. State Poultry Society.

Terms : (to others) $1.00 a year; six copies for $5.00.

To Foreign Countries postage must be added.

Advertisements, concerning our specialties only, are taken at 25 cts. per line (about 9 words) of space for one, 20 cts. for three, and 15 cts. for six or more insertions. **N. B.**—Unreliable parties shall not advertise with us, if we know it. No advertisement inserted for less than $1, and no subscription received for less than one year.

All communications should be addressed to THE POULTRY BULLETIN, (Box **316**) New York City.

All Subscriptions to the BULLETIN, Membership Fees and Dues, should be sent to the Treasurer, WILLIAM SIMPSON, Jr., Box **316,** New York City, and should be in the shape of a P. O. Money order, Registered letter or Check on New York. Bank notes may be sent in a letter, but we do not hold ourselves responsible if they are lost in transmission.

OFFICE OF THE SOCIETY, 27 Chatham St., opposite the City Hall Park.

ENGLISH AGENCY.

The "POULTRY BULLETIN" may be obtained through Mr. LEWIS WRIGHT, No. 1 Bellevue Terrace, Crouch End, Hornsey, London, N., England, to whom subscriptions from any part of Great Britain may be forwarded, by postal order or otherwise, at the rate of Five Shillings per annum, which pays subscription and postage. Advertisements for the BULLETIN may also be sent to the same address.

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THE SEMI-ANNUAL MEETING OF THE NEW YORK STATE POULTRY SOCIETY will take place at their rooms, No. 27 Chatham street, New York City, Tuesday, July 9th, at 11 o'clock A. M. A full attendance of the members of the society is most earnestly requested. Several measures will be submitted for action by the Executive Committee, one of which will be the future conduct and management of the POULTRY BULLETIN. As the members are well aware, the editing and publishing of the paper has, since its commencement, been borne *voluntarily* by three or four members of the Executive Committee. With the great increase of work, resulting from the enlarged size and daily augmenting subscription list, it is found impossible to conduct it any longer on the *volunteer system.* Those who have thus far given their time and labor to forward the interests of the society and its journal, now find it impossible to spare so large a portion of their time as is required to keep the paper up to its present high standard. It becomes, therefore, imperatively necessary that the society should, at this coming meeting, take some action in the matter.

WE ARE this month again obliged to increase our size by four extra pages. Many interesting and valuable communications were on hand, which were opportune to the season, and would have had to lay over another month unless we made room for them. Our readers will find this, we think, the most interesting number yet issued. The article on "The Utility of a Scale of Points" is alone worth a year's subscription, and we commend it to the careful perusal of every reader.

A GREAT MANY of our subscribers are still in arrears. Are they waiting for that little bill? Don't do it; spare us the time and yourselves the annoyance of being dunned.

TO OUR ADVERTISING FRIENDS.—Quite a number have been disappointed that their advertisements did not appear in this and the previous number of the BULLETIN. But in order to issue our journal "on time," we find it necessary to close our forms promptly on the 20th of the month. *All advertisements, therefore, to be sure of insertion, must be received on or before the 18th of the month.*

In this connection we take occasion to call the attention of our many readers to our paper as an advertising medium: With a large and constantly increasing circulation, our columns offer the best mode of bringing your wares to the notice of those who purchase Poultry, Fish, Pet Animals, etc., and all articles pertaining to the culture and breeding thereof, of any paper in the country. Since the commencement of the present volume, we have received many flattering testimonials in attestation of this. Many of our patrons having been obliged to withdraw their advertisements before the expiration of the time for which they were inserted, having completely *sold out* their stock, and received more orders for eggs than they could fill. As we admit no advertisements of doubtful character, neither any from irresponsible or unfair dealers—knowing them to be such—our columns are much more valuable to those who have a good article to sell, than the more general advertising sheets, even though of perhaps larger circulation. In such papers your advertisement is *lost*, or if noticed, it is by those who have no interest in what you have to sell. While, in our pages, the persons who read the advertisements are the very ones who need such goods and know they are to be found here. Of late we have had numerous inquiries where to get young chicks, this year's hatch. The bad success with early set eggs, has turned their attention to looking up those who have early-hatched stock to sell. To all such inquiries we answer here, *consult our advertising columns*;

you will there find what you want. It is not the *transient* advertisers who receive the greatest benefit. The man who keeps his name and wares *constantly* before the public soon finds his name and business a household word. He is known everywhere and his customers seek him out. The transient advertiser thinks he cannot afford it, advertises but once or twice, and his name disappears from the paper; some customer again desiring stock, looks for his name but failing to find it, sends his order to another; new acquaintances are formed, and perhaps a regular customer is lost. To be known you must keep your name before the public. Let people know where you are, what you are, and what you are doing.

No. 4 of the Illustrated Book of Poultry is received, and opens, like those preceeding it, with two splendid colored plates; one of Malays, and the other Spangled Golden Hamburghs. Chapter VII. on "Fattening and Killing," is very complete, and contains a mass of well-digested information. The illustrations of fattening coops and implements explain the European mode of preparing poultry for market in the fullest manner. Chapter VIII. on the "Cultivation of Poultry as National Food," besides being of great interest to the general reader, contains many valuable statistics of the poultry and egg trade of Europe, and much well-sifted information in regard to the practicability of profitably raising poultry on a large scale. The four first numbers are now ready for delivery.

Importations and Exportations.

Messrs. W. C. & W. M. Bush, Auburndale, Mass., received, on May 31st, per steamer Cuba, from England, one trio of Duckwing Game Bantams. They arrived in fine condition and feather.

Mr. P. C. Biegel, 19 Bethune street, New York City, received, per steamer City of Antwerp, one trio of Black-breasted Red Game Bantams, from Mr. Walker Falkland, Fifeshire, Scotland. Very fine specimens, and prize winners at several shows in Scotland.

Mr. Philander Williams shipped to Lady Gwydyr, Stoke Park, Eng., four Light Brahma hens, all selected and very choice birds.

In April last Mr. W. Simpson, Jr., shipped three settings of Light Brahma eggs to Mr. John Pares, the noted Light Brahma breeder of England. Under date of June 7th Mr. P. writes: "The result is, to my mind, very satisfactory, considering the long distance the eggs traveled. Altogether, out of 39 eggs, *fourteen* healthy chicks came out; of them, all but one are alive."

"Awards on Essays, &c."

At the exhibition of the N. Y. S. P. Society, held December, 1870, prizes were offered for essays on "Breeding and Management of Poultry," and for "Plans and Specifications of Poultry Houses." The entries for the above were handed to a committee (outside of the society) for decision. After a lapse of over six months, the articles were returned unacted upon, the committee not being able to meet together, or spend the time necessary to pass a correct judgment thereon. A long delay then ensued in the endeavor to find uninterested parties who could, or would spare the time. In February last Mr. P. Williams, of Taunton, and Mr. W. H. Brackett, of Boston, Mass, kindly consented to decide the matter, and after a lengthy and tedious examination they awarded as follows:

Best thesis on "Breeding and Management," to James Long, Plymouth, England.

2d. J. G. Hamilton, New York.

3d. A. M. Halsted, Rye, N. Y.

Plans and Specifications:—Best, A. M. Halsted, Rye, N. Y.

2d. H. Woodward, Worcester, Mass.

Cure for Chicken Cholera.

Mr. W. H. Feror, Mechanicstown, Md., sends us the following cure for chicken cholera, which, he says has been of great service in his section:

"Two oz. alum, two oz. resin, two oz. copperas, two oz. lac sulphur, two oz. cayenne pepper; pulverize, then mix three tablespoonsful of the powder with one quart corn meal, and dampen for use. This quantity is sufficient for twelve fowls, and may be used either as a preventive or cure. For the first it should be given once or twice a week."

Peculiar Eggs.

Mr. W. W. Lewis, Lexington, Va., states that he found in his yard a light Brahma egg, weighing 4 oz. On breaking the shell it was found to contain a smaller egg, perfect in every way. The outside shell was filled with the white, but no yolk. The inner egg was not quite as large as the Brahmas usually lay. Lately, while visiting the East, Mr. Copeland, of Raynham, Mass., showed us an egg measuring $3\frac{1}{2}$ inches by $2\frac{3}{4}$ in diameter. Inside of this was another perfect egg of a fair average size. The most singular feature was that between the two shells were *two* perfect yolks. This egg was laid by a common fowl.

The Massachusetts Poultry Association

Decided at a late meeting of their Executive Committee to hold their Second Annual Exhibition at Music Hall, Boston, on January 13th to 17th, 1873.

Questions and Answers.

Mr. Jos. S. Osborne, L. I., writes us: "One of my neighbors recently killed a Brahma cock, weighing about 11 lbs., which has had the 'Penguin' affliction. Sometimes he got up nearly or quite as well as if not afflicted, and would remain so for a considerable length of time, and after a while again resume his upright walk. He seemed healthy, ate well, and crowed; which a sick bird is not apt to do. Seeing the notice of a Brahma chick thus afflicted in the March Bulletin, induced me to send you this account. Is there any cure for it?"

This trouble is usually caused by overfeeding. Those varieties which take on fat internally are most subject to it, such as Brahmas and Cochins. The fat accumulates in the lower part of the abdomen, and i drags that part of the body down, and in hens frequently ruptures the oviduct or egg-passage. The overstrained muscles are unable to keep the body in position, and the bird must necessarily assume the position of a Penguin. We doubt whether any cure is possible, but would recommend to feed very sparingly on such food as will create strength of muscle, not fat. Placing the bird in a coop or box, in which it would be impossible for it to stand up, and allowing it only a short time for exercise daily, might be of benefit.

Those in want of choice stock will do well to note the advertisement of Mr. Bicknell, who, having made a change of business, offers his entire breeding stock for sale. His success at the numerous exhibitions, as a premium taker, warrants his fowls to be of very superior character.

We would call the attention of our friends who are sending us such hosts of new subscribers to the advisability of having all subscriptions commence with No. 1 of the present volume (April.)

With No. 12 we shall give a title page and complete index of this volume, which, when bound, will make a handsome and valuable book.

Many clubs, some large, some small, have been handed in, and all say it was no trouble to induce persons to subscribe. A boy of fifteen writes:—

"I send you enclosed $30, for which please send vol. 5 of Poultry Bulletin to the following persons . . . . Please send Wright's New Illustrated Book of Poultry as fast as the numbers are received . . . . I was only four days making up this club, and think I shall try for a trio of fowls now."

A young lady in this city is trying for the pair of Black Carrier Pigeons, and reports upwards of 50 names as the result of two days' canvassing.

Another lady residing in Broome Co., N. Y., writes:—

"Enclosed I send you 40 subscriptions. Please send me Premium No. 32, a Silver-plated Ice Pitcher, and if it is handsome, I shall send for the cake basket soon. I was only a few days in making this up."

We might add numbers more of the same kind, but the above are enough to show that a little exertion is all that is necessary to secure any of the valuable premiums offered in our list. Many of them we can duplicate, and we anticipate being called upon to do so in many cases.

Let others go and do likewise, and thus enable us to still further increase the number and interest of our pages.

Animals Received at Central Park.

The following is the list of animals received in Central Park for the month of June, 1872.

W. A. Conklin.

2 African Hogs. *Sus scrofa*, Linn. From Tangiers. Placed on exhibition.

1 Mocking Bird. *Mimus polyglottus*, Linn. Hab., Southern United States. Donated.

1 Sea Lion. *Eumetopias stelleri.* Hab., Northern Pacific Ocean. Placed on exhibition.

1 Snowy Owl. *Nyctea nivea*, Gray. Hab., United States. Donated.

1 Raccoon. *Procyon lotor*, Stoor. Hab., United States. Donated.

1 Tapir. *Tapirus Americanus*, Linn. Hab., South America. Placed on exhibition.

1 Tiger. *F. tigris*, Linn. Hab., India.

1 Spotted Hyena. *Hyæna crocuta*, Schr. Hab., Southern Africa. 1 Nylghau. *Portax picta*, Pall. Hab., Africa. 1 Dorcas Gazelle. *Antilope Dorcas*, Linn. Hab., North Africa. 3 African Porcupines. *Hystrix cristata.* Hab., North Africa. Placed on exhibition.

2 Chestnut Finches. *Donacola castaneothorax.* Gould. Hab., Queensland. Donated by Mr. Henry Erben.

2 Green Finches. *Fringilla chlores*, Linn. Hab., Europe. Donated by Master George Schrader.

5 Rattlesnakes. *Crotalus durissus*, Linn. Hab., United States. Donated.

3 Squirrels. *Sciurus ludovicianus*, Custis. Hab., Arkansas. Donated by Dr. J. Simms.

1 Opossum. *Diadelphys Virginianus*, Shaw. Hab., United States. Donated.

1 Two-toed Sloth. *Cholopus didactyles*, Linn. Hab., Brazil. Donated.

1 Horned Toad. *Phrynosoma cornuta*, Gray. Hab., Texas. Donated.

4 Rouen Ducks. *A. domesticus*, Linn. Purchased.

1 Squirrel Monkey. *Callithrix Sciureus*, Kuhl. Hab., Brazil. Donated.

2 Java Sparrows. *Padda oryzivora*, Linn. Hab., Java. Donated.

1 Horned Owl. *Bubo Virginianus*, Bow. Hab., United States. Donated.

1 Gray Fox. *Vulpes Virginianus*, Rich. Hab., United States. Donated.

BIRTHS.

1 Elk. *Cervus Americanus.*
1 African Buffalo. *Bubalus caffre.*
4 Deer. *Cervus Americanus.*
22 Guinea fowl. *Numida meleagris.*
16 Swans. *Cygnus olor.*
60 Common Ducks.